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PTO/SB/08A (10-01)
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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Complete if Known			
		Application No.	10/727,699		
		Filing Date	December 3, 2003		
		First Named Inventor	Avetik Harutyunyan		
		Art Unit	1754		
		Examiner Name	Not Yet Known		
Sheet	1	of	2	Attorney Docket Number	23085-07810

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Document No. Number - Kind Code ² (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
/EMJ/	A1	US-4,615,649	10-07-1986	Sharpless
/EMJ/	A2	US-5,424,054	06-13-1995	Bethune et al.
/EMJ/	A3	US-5,505,566	04-09-1996	Gruber
/EMJ/	A4	US-5,752,788	05-19-1998	Crum
/EMJ/	A5	US-5,759,230	06-02-1998	Chow et al.
/EMJ/	A6	US-5,816,509	10-06-1998	Ahn et al.
/EMJ/	A7	US-6,436,167	08-20-2002	Chow et al.

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T ⁶
/EMJ/	B1	JP 11-246901	09-14-1999	Hitachi Zosen Corporation	X
/EMJ/	B2	JP 2001-254109	09-18-2001	Toda Kogyo Corp	X
/EMJ/	B3	JP H11-293308	10-26-1999	Mitsubishi Materials Corp	X
/EMJ/	B4	JP S53-91054	07-25-1978	Hitachi Maxwell Co., Ltd	
/EMJ/	B5	JP S56-136904	10-16-1981	Toshiba Corporation	
/EMJ/	B6	JP S61-69906	05-13-1986	Nissan Chemical Industries Co., Ltd.	

OTHER REFERENCES - NON-PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶
/EMJ/	C1	AGO, HIROKI et al., "Gas-Phase Synthesis of Single-wall Carbon Nanotubes from Colloidal Solution of Metal Nanoparticles", <i>J. Phys. Chem.</i> , November 1, 2001, Vol. 105, No. 43, pp. 10453-10456	
/EMJ/	C2	BETHUNE, D.S. et al., "Cobalt-Catalysed Growth Of Carbon Nanotubes With Single-Atomic-Layer Walls", <i>Nature</i> , June 17, 1993, Vol. 363, pp. 605-607.	

Examiner Signature	/Edward M. Johnson/ (04/02/2007)	Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809.

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/EMJ/	C3	CASELL, ALAN M. et al., "Large Scale CVD Synthesis of Single-Walled Carbon Nanotubes", <i>J. Phys. Chem.</i> , 1999, Vol. 103, pp. 6484-6492.	
/EMJ/	C4	CHENG, H.M. et al., "Large-Scale And Low-Cost Synthesis Of Single-Walled Carbon Nanotubes By The Catalytic Pyrolysis Of Hydrocarbons", <i>Applied Physics Letters</i> , Vol. 72, No. 25, pp. 3282-3284.	
/EMJ/	C5	CI, LIJIE et al., "Preparation Of Carbon Nanofibers By The Floating Catalyst Method" <i>Carbon</i> , 2000, 38, pp.1933, 1937.	
/EMJ/	C6	IJIMA, SUMIO et al., "Single-Shell Carbon Nanotubes Of 1-Nm Diameter", <i>Nature</i> , June 17, 1993, Vol. 363, pp. 603-605.	
/EMJ/	C7	IVANOV, V. et al. "The Study Of Carbon Nanotubes Produced By Catalytic Method", Elsevier Science B.V., Chemical Physics Letters, Vol. 223, June 24, 1994, pp. 329-335.	
/EMJ/	C8	JOURNET, C. et al., "Large-Scale Production Of Single-Walled Carbon Nanotubes By The Electric-Arc Technique", <i>Nature</i> , Vol. 388, August 21, 1997, pp. 756-758.	
/EMJ/	C9	LI, W.Z. et al., "Large-Scale Synthesis of Aligned Carbon Nanotubes", <i>Science</i> , Vol. 274, December 6, 1996, pp. 1701-1703.	
/EMJ/	C10	NIKOLAEV, PAVEL et al., "Gas-Phase Catalytic Growth Of Single-Walled Carbon Nanotubes From Carbon Monoxide", Elsevier Science B.V., <i>Chemical Physical Letters</i> , Vol. 313, 1999, pp. 91-97.	
/EMJ/	C11	SU, MING et al., "A Scalable CVD Method for the Synthesis of Single-Walled Carbon Nanotubes With High Catalyst Productivity", Elsevier Science B.V., <i>Chemical Physics Letters</i> , Vol. 322, May 26, 2000, pp. 321-326.	
/EMJ/	C12	THESS, ANDREAS et al., "Crystalline Ropes of Metallic Carbon Nanotubes", <i>Science</i> , Vol. 273, July 26, 1996, pp. 483-487.	
/EMJ/	C13	ZHU, W.H. et al., "Direct Synthesis of Long Single-Walled Carbon Nanotube Strands", <i>Science</i> , Vol. 296, May 3, 2002, pp. 884-886.	

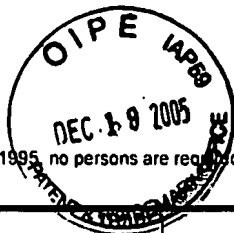
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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document No. Number - Kind Code ² (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
/EMJ/	A1	US 2003/0161782 A1	08-28-2003	Kim
/EMJ/	A2	US 2004/0062992 A1	04-01-2004	Kajiura et al.

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T ⁶
/EMJ/	B1	WO 02/070405 A	09-12-2002	Sony Corporation Abstract Only	X

OTHER REFERENCES - NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶
/EMJ/	C1	ANDREWS, R. et al., "Continuous Production of Aligned Carbon Nanotubes: A Step Closer to Commercial Realization", Chemical Physics Letters, April 16, 1999, pp. 467-474, Vol. 303, No. 5-6.	
/EMJ/	C2	MAYNE, M. et al., "Pyrolytic Production of Aligned Carbon Nanotubes From Homogenously Dispersed Benzene-Based Aerosols", Chemical Physics Letters, April 20, 2001, Vol. 338, pp. 101-107, Amsterdam, Netherlands.	
/EMJ/	C3	MOISALA, A. et al., "The Role of Metal Nanoparticles in The Catalytic Production of Single-Walled Carbon Nanotubes - a review", Journal of Physics: Condensed Matter, March 10, 2003, pp. 3011-3035, Vol. 15.	
/EMJ/	C4	PCT International Search Report and Written Opinion; PCT/IB2004/004454, November 17, 2005. 15 pages.	
/EMJ/	C5	SONGSASEN, A. et al., "Preparation of Carbon Nanotubes by Nickel Catalyzed Decomposition of Liquefied Petroleum Gas (LPG)", Kasetsart University, Bangkok, Thailand, 2001, pp. 354-359, Vol. 35, No. 3.	

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